UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,402	07/16/2003	William J. Semper	SAMS01-00261	2926
Docket Clerk	7590 12/19/200	8	EXAMINER	
P.O. Box 80088			VU, MICHAEL T	
Dallas, TX 75380			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			12/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Occurrence	10/620,402	SEMPER ET AL.				
Office Action Summary	Examiner	Art Unit				
	MICHAEL T. VU	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>02 Oc</u>	ctoher 2008					
	action is non-final.					
<i>,</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
·						
,— , , , — , , , , , , , , , , , , , ,	Claim(s) <u>1-21</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-21</u> is/are rejected.						
7) Claim(s) is/are objected to.	alastian requirement					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) X Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/620,402 Page 2

Art Unit: 2617

#### **DETAILED ACTION**

1. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyama (US 2002/0114305) in view of Igarashi (US 2001/0012777).

Regarding claim 1, Oyama teaches for use in a wireless network (Figures #1-2), a method of providing quality-of-service (QoS) functions to a mobile station accessing the wireless network [0035-0036], the method comprising the steps of receiving from the mobile station a packet data call initiation signal [0015, 0075-0077]; sending an authorization request corresponding to the mobile station [0074-0077, 0093, 0110]; receiving application information corresponding to the mobile station [0015-0018, 0020-0022]; and determining quality-of-service parameters according to the quality-of-service profile [0024, 0088-0093], and the application information [0003-0007], wherein the

mobile station thereafter communicates according to the quality-of-service parameters [0005-0009, 0033-0036, 0041-0045, 0091-0094].

**But Oyama does not clearly teach** receiving an authorization message and quality-of-service profile, corresponding to the mobile station;

However, Igarashi teaches receiving an authorization message [0014-0017] and quality-of-service profile [0007, 0060-0068], corresponding to the mobile station [0014-0017].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oyama, with Igarashi's teaching, in order for implementing a value of services such as Quality of Service and the service quality controlling the packets in different networks of a mobile communication system.

Regarding claim 2, Oyama and Igarashi teach the method of claim 1, wherein the packet data call initiation signal is received in a base station controller [0020] of Oyama.

**Regarding claim 3,** Oyama and Igarashi teach the method of claim 1, wherein the quality-of-service profile is stored on an authorization server [0088-0092] of Oyama.

**Regarding claim 4,** Oyama and Igarashi teach the method of claim 1, wherein the quality-of-service parameters are sent to a packet data serving node [0020-0024] of Oyama.

**Regarding claim 5,** Oyama and Igarashi teach the method of claim 1, wherein the application information includes an application data class [0032-0034] of Oyama.

**Regarding claim 6,** Oyama and Igarashi teach the method of claim 1, wherein the quality-of-service profile includes delay [0044], maximum data rate [0044-0045], and data loss rate information [0032, 0044, 0069, 0077] of Oyama.

**Regarding claim 7**, Oyama and Igarashi teach the method of claim 1, wherein quality-of-service parameters are determined by a quality-of-service control component [0120-0125, 0085-000092] of Igarashi.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Medvinsky (US 2003/0137944) in view of Oyama (US 2002/0114305).

Regarding claims 8 and 15, Medvinsky teaches a call management system [0022] comprising; a QoS controller [0009, 0027] capable of receiving from a mobile

station a packet data call initiation signal [0022-0023] and sending an authorization request corresponding to the mobile station to an authorization server [0023-0024, 0026-0027], wherein the QoS controller receives from the authorization server an authorization message [0023-0024, 0026-0027] and

But Medvinsky does not clearly teach quality-of-service profile corresponding to the mobile station, and wherein said QoS controller is further capable of receiving application information corresponding to the mobile station, determining quality-of-service parameters according to the quality-of-service profile and the application information, and transmitting a control message to the mobile station capable of causing the mobile station to communicate thereafter according to the quality-of-service parameters.

However, Oyama teaches quality-of-service profile corresponding to the mobile station [0012-0016, 0091-0094], and wherein said QoS controller is further capable of receiving application information corresponding to the mobile station [0015-0018, 0020-0022], determining quality-of-service parameters according to the quality-of-service profile and the application information [0024, 0088-0093], and transmitting a control message to the mobile station capable of causing the mobile station to communicate thereafter according to the quality-of-service parameters [0005-0009, 0033-0036, 0041-0094].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Medvinsky, with Oyama's teaching, in order to establishing Quality of Service (QoS) for a signaling bearer used to establish a

multimedia such as streaming, audio, or video services session across an IP Backbone networks for avoiding delay.

Regarding claims 9 and 16, Medvinsky and Oyama teach the method of claims 8, 15, wherein the packet data call initiation signal is received in a base station controller [0020] of Oyama.

Regarding claims 10 and 17, Medvinsky and Oyama teach the method of claims 8, 15, wherein the quality-of-service profile is stored on an authorization server [0088-0092] of Oyama.

**Regarding claims 11 and 18,** Medvinsky and Oyama teach the method of claims 8, 15, wherein the quality-of-service parameters are sent to a packet data serving node [0020-0024] of Oyama.

**Regarding claims 12 and 19,** Medvinsky and Oyama teach the method of claims 8, 15, wherein the application information includes an application data class [0032-0034] of Oyama.

**Regarding claims 13 and 20,** Medvinsky and Oyama teach the method of claims 8, 15, wherein the quality-of-service profile includes delay [0044], maximum data rate [0044-0045], and data loss rate information [0032, 0044, 0069, 0077] of Oyama.

**Regarding claims 14 and 21,** Medvinsky and Oyama teach the method of claims 8, 1, wherein quality-of-service parameters are determined by a quality-of-service control component [0024, 0092-0093] of Oyama.

## Response to Arguments

6. Applicant's Remarks/Arguments filed October 02, 2008, have been fully considered but they are not persuasive.

On page 9 of Applicant's Remarks, that "claims 8 and 15 require that QoS controller receives from the authorization server an authorization message and quality-of-service profile corresponding to the mobile station", lines 6-7.

In response, the examiner carefully reviewed the Applicant's Remarks. However, Oyama indeed clearly discloses a signaling bearer quality of service profile is preestablished and configured in various nodes in an access network, and further discloses A message requesting a bearer to support a communication between a mobile terminal and an access point to a packet data network is generated. That message includes a signaling quality of service indicator, which when detected, causes a bearer to be established between the mobile terminal and the access point in accordance with the pre-established signaling quality of service profile (Abstract).

Moreover, Oyama explicitly discloses the functionality of the communication network. The user may communicate with different user or with an application server such as streaming services, in which a "session" established between the mobile and remote hosts includes two or more different forms of media that often require **different types of QoS, e.g., voice, e-mail, video, etc**, under the Global System for Mobile Communications (GSM), or Universal Mobile Telecommunications System (UMTS)

network, and further includes the mobile terminal is coupled to a radio access network (RAN) over the radio interface for supporting packet switch/data networks. Hence, the bearer service over a GPRS/UMTS network is important to achieving the required end-to-end bearer service between network and mobile station. (see paragraphs [0004-0005, 0013-0014]), and ([0016-0024]).

Additional, Oyama discloses the "policing" the signaling quality of service profile and [0102-0104], and Oyama further discloses the INVITE message includes the session details regarding the number of media flows and requested corresponding quality of service. The CSCF authenticates the UE-A as a subscriber and authorizes the session [0075-0076].

Furthermore, Medvinsky clearly discloses the QoS parameters are bandwidth, delay, jitter, information loss, network availability, and security, and the quality of service server by providing a signaling controller; coupling the signaling controller with a first quality service server that operable for establishing quality of service in a communication system (See paragraphs [0005, 0008-0009]).

As a final point, the examiner notes that this is a USC 103 rejection and the KSR ruling clearly states that one skilled would make obvious modifications to the prior art within the scope/bounds of the teachings. Therefore, since Oyama and Medvinsky teach the system and method for controlling quality of service in a communication system, one skilled would arrive at a design that allows the user for transporting data between the mobile user and the content server for preventing packet delay.

In view of the above the rejections using Oyama and Medvinsky are maintained.

This rejection is made FINAL.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

Application/Control Number: 10/620,402 Page 10

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Vu/ Examiner AU-2617

/Charles N. Appiah/ Supervisory Patent Examiner, Art Unit 2617